

FIRE ALARM NOTES

1. SCOPE OF WORK INCLUDES PROVIDING A NEW ANALOG ADDRESSABLE FIRE ALARM SYSTEM THROUGHOUT THE WORK AREA (WING 4E OF THE VA MEDICAL CENTER). THIS SYSTEM SHALL BE AN EXTENSION OF THE EXISTING FIRE ALARM SYSTEM. SCOPE INCLUDES PROVIDING ADDITIONAL FIRE ALARM CONTROL PANEL MODULES, REPROGRAMMING THE EXISTING FIRE ALARM CONTROL PANEL TO ACCOMMODATE NEW DEVICES AND REMOVE DEMOLISHED DEVICES, POWER SUPPLIES, EXTENDER PANELS, SPRINKLER SYSTEM SUPERVISION AND ALARM NOTIFICATION DEVICES, MANUAL PULL STATIONS, AUTOMATIC DETECTION, ELECTROMAGNETIC DOOR HOLDERS/CLOSERS, ADDRESSABLE RELAYS TO CONTROL SMOKE/FIRE DAMPERS, SPEAKERS AND STROBES FOR OCCUPANT NOTIFICATION, WIRING, CONDUIT, JUNCTION BOXES, TERMINAL CABINETS, AND ALL OTHER ASSOCIATED EQUIPMENT FOR A COMPLETE, OPERABLE SYSTEM.
2. ALL WORK AND INSTALLATION SHALL CONFORM WITH THE APPLICABLE PROVISIONS OF THE FOLLOWING:
- 2.1. NFPA 70 (2008 EDITION)
 - 2.2. NFPA 72 (2010 EDITION)
 - 2.3. NFPA 90A (2009 EDITION)
 - 2.4. NFPA 101 (2010 EDITION)
 - 2.5. VA FIRE PROTECTION DESIGN MANUAL (4TH EDITION)
 - 2.6. FM APPROVAL MANUAL
 - 2.7. OTHER CODES AND STANDARDS INDICATED IN THE SPECIFICATIONS
3. ALL NEW FIRE ALARM DEVICES SHALL BE COMPATIBLE WITH AND MATCH EXISTING HOSPITAL TYPE AND MANUFACTURER (SIEMENS, MXL-V COMPATIBLE). NEW DEVICES SHALL INTERFACE WITH THE EXISTING HOSPITAL SYSTEM TO PROVIDE A FULLY OPERATIONAL SYSTEM WITH MONITORING AND CONTROL VIA THE MAIN HOSPITAL PANEL. ALL NEW DEVICES SHALL BE ADDRESSABLE AND PROGRAMMED INTO THE OVERALL BUILDING SYSTEM WITH CONNECTIONS TO THE AUTOMATED BUILDING NOTIFICATION SYSTEM. ALL CONNECTIONS AND/OR MODIFICATIONS TO THE EXISTING SYSTEM SHALL BE COORDINATED WITH FACILITY MAINTENANCE PERSONNEL AND THEIR DESIGNATED APPOINTEES.
4. PROVIDE THE FOLLOWING CIRCUITS:
- 4.1. NOTIFICATION APPLIANCE CIRCUITS (NAC): CLASS B
 - 4.2. SIGNALING LINE CIRCUITS (SLC): CLASS B
 - 4.3. INITIATING DEVICE CIRCUITS (IDC): CLASS B
 - 4.4. COMMUNICATIONS CIRCUITS (BETWEEN BUILDING FIRE ALARM CONTROL UNITS): CLASS X
5. THE EXISTING FIRE ALARM PANEL IS A SIEMENS MXL-V. NEW REMOTE POWER SUPPLIES WILL PROVIDE POWER FOR NEW STROBES, SPEAKERS, AND ELECTROMAGNETIC DOOR HOLDERS. NEW REMOTE POWER SUPPLIES AND SIGNALING LINE CIRCUITS MAY BE CONNECTED DIRECTLY TO THE EXISTING FIRE ALARM CONTROL PANEL OR MAY BE CONNECTED VIA A NETWORKED EXTENDER PANEL. IF A NETWORKED EXTENDER PANEL IS USED, THE CONTRACTOR WILL PROVIDE AN EXTENDER PANEL THAT IS UL LISTED TO BE COMPATIBLE WITH THE EXISTING FACP AND THE NEW DEVICES. CONTRACTOR SHALL PROVIDE A PRINTED COPY OF THE EXISTING FIRE ALARM PROGRAM PRIOR TO MAKING ANY CHANGES.
6. PROVIDE NEW ADDRESSABLE SLC(S) TO MONITOR FIRE ALARM INITIATION DEVICES, AND NEW NAC(S) TO CONTROL FIRE ALARM NOTIFICATION DEVICES, AS INDICATED IN THE DESIGN DRAWINGS. PROVIDE ALL EQUIPMENT, SOFTWARE, PROGRAMMING, AND ACCESSORIES, WHETHER MENTIONED OR NOT, INCLUDING SMOKE AND HEAT SENSORS, ADDRESSABLE INTERFACE AND RELAY DEVICES, TERMINAL CABINETS, CONDUIT, WIRE, JUNCTION BOXES, FASTENERS, HANGERS, ETC. IN ORDER TO PROVIDE A COMPLETE WORKING SYSTEM.
7. ALL WIRING AND CIRCUITS SHALL BE PROVIDED IN ELECTRICAL METALLIC TUBING AND CONDUIT CONCEALED ABOVE THE CEILING OR BEHIND THE WALLS. MINIMUM TRADE SIZE IS ¾ INCHES [19MM]. NO CIRCUITS SHALL BE SUPPORTED FROM SPRINKLER PIPING.
8. SEE DETAIL SHEET FA501 FOR FIRE ALARM OPERATING SEQUENCE.
9. ALL STROBES ARE RATED 15cd, UNO. INSTALL ALL NEW WALL MOUNTED STROBES 6 INCHES [150MM] BELOW CEILINGS OR WITH BOTTOM OF DEVICE AT 80 INCHES [2M] AFF, WHICHEVER IS LOWER. THE MAJORITY OF DEVICES ARE TO BE CEILING MOUNTED.
10. DOUBLE ACTION PULL STATIONS SHALL BE INSTALLED WITH OPERATING LEVER MOUNTED AT 48 INCHES [1,219MM] AFF.
11. REFLECTED CEILING PLAN SHOWN IS FOR CONVENIENCE ONLY. FOR CEILING TYPES AND HEIGHTS, SEE ARCHITECTURAL DRAWINGS.
12. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF SMOKE AND FIRE BARRIER WALLS. ALL PENETRATIONS IN RATED WALLS SHALL BE FIRESTOPPED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. ALL FLOOR PENETRATIONS SHALL BE FIRESTOPPED IN ACCORDANCE WITH PROJECT SPECIFICATIONS. ALL FLOORS SHALL BE CONSIDERED 2-HOUR RATED FLOORS, UNO.
13. SPRINKLER CONTRACTOR TO PROVIDE ALL CONTROL VALVES, VALVE SUPERVISORY TAMPER SWITCHES, AND WATERFLOW ALARM SWITCHES. FIRE ALARM CONTRACTOR SHALL MAKE ALL ELECTRICAL CONNECTIONS TO THE ABOVE DEVICES.
14. COORDINATE PHASED REMOVAL/DEACTIVATION OF EXISTING FIRE ALARM DEVICES WITH FACILITY PERSONNEL. MAINTAIN OPERATIONAL MANUAL PULL STATIONS AT EXITS THROUGHOUT THE PROJECT DURATION. DEVICES THAT ARE NOT OPERATIONAL SHALL BE COVERED AND LABELED "NOT IN SERVICE".
15. PRE-RECORDED VOICE MESSAGES ARE TO BE COORDINATED WITH AND APPROVED BY THE COTR.
16. COORDINATE ZONES WITH COTR. EACH ZONE SHALL HAVE A SEPARATE SPEAKER CIRCUIT, AMPLIFIER, AND REMOTE POWER SUPPLY FOR STROBES.
17. ALL ADDRESSABLE DEVICES ARE TO HAVE A PRINTED LABEL AFFIXED TO THE DEVICE SHOWING THE DEVICE'S ADDRESS. ALL SPEAKERS AND STROBES ARE TO BE PROVIDED WITH A PRINTED LABEL IDENTIFYING THE DEVICE'S CIRCUIT.

FIRE ALARM GENERAL REQUIREMENTS

1. ELECTRICAL CONTROL PANELS, EQUIPMENT, MATERIALS AND DEVICES PROVIDED OR INSTALLED AS WORK OF THIS PROJECT SHALL BEAR UL LABEL, OR IF UL LABEL IS NOT AVAILABLE, THE ITEM SHALL BE TESTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH NFPA 70. PROVIDE TESTING WITHOUT ADDITION TO THE CONTRACT SUM.
2. MATERIALS AND EQUIPMENT SHALL BE NEW.
3. SUBMIT SHOP DRAWINGS AND PRODUCT DATA FOR EACH MATERIAL AND ITEM OF EQUIPMENT, INCLUDING RISER DIAGRAM AND PANEL DRAWINGS.
4. SUBMIT PROJECT RECORD DOCUMENTS AND SPARE PARTS IN ACCORDANCE WITH REQUIREMENTS IN PROJECT SPECIFICATIONS.

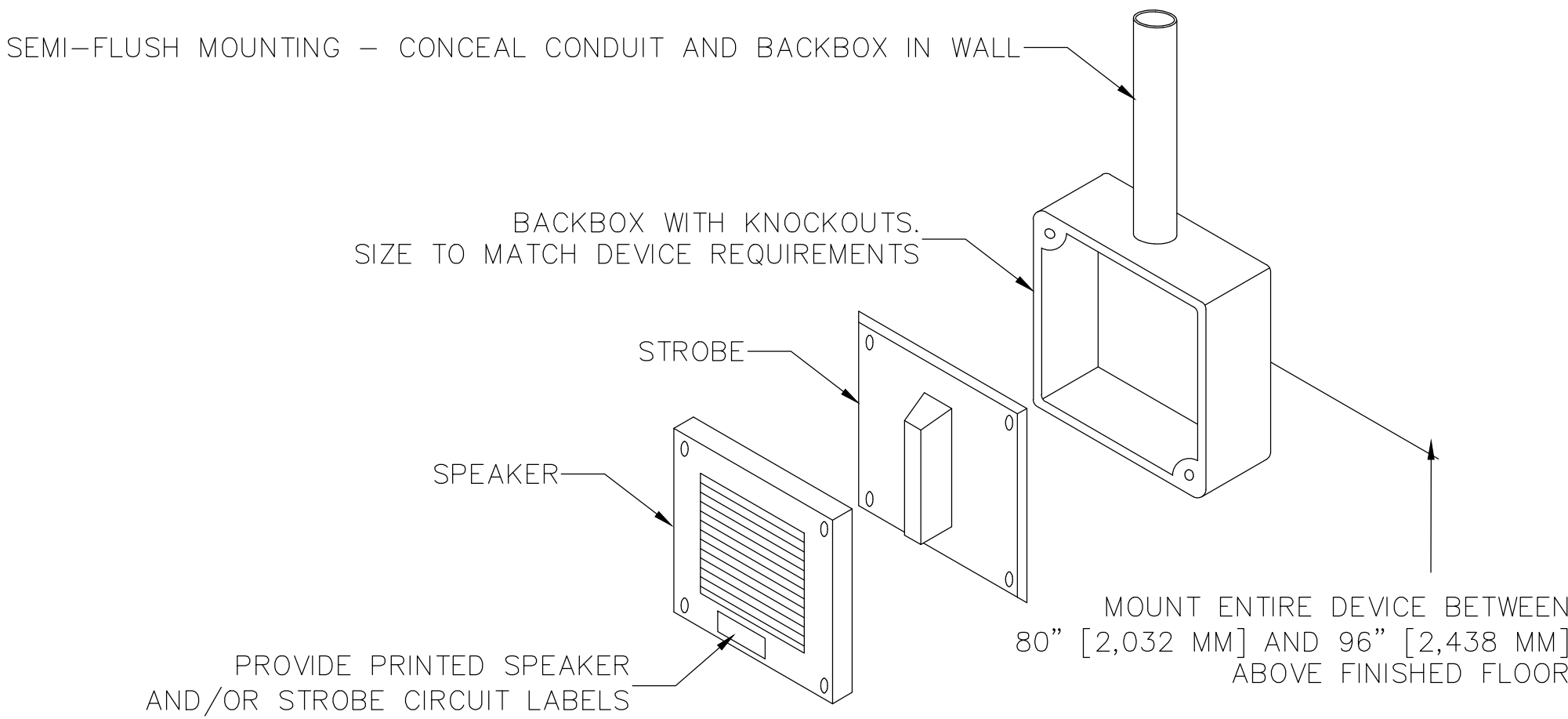
ABBREVIATIONS

A	AMP
ABV	ABOVE
A/E	ARCHITECT/ENGINEER (OF RECORD)
AFF	ABOVE FINISHED FLOOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
A/S	AUTOMATIC SPRINKLER
AWG	AMERICAN WIRE GAUGE
BLDG	BUILDING
BOB	BOTTOM OF BEAM
BOJ	BOTTOM OF JOIST
C	CEILING
CFM	CUBIC FOOT PER MINUTE
CLO	CLOSET
CMU	CONCRETE MASONRY UNIT
COM	COMMUNICATIONS
CONT	CONTINUED
CORR	CORRIDOR
COTR	CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE
DS	DRY SPRINKLER
EC	EXTENDED COVERAGE SPRINKLER
ELEC	ELECTRIC
EOLR	END OF LINE RESISTOR
EXIST	EXISTING
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
FDC	FIRE DEPARTMENT CONNECTION
GPM	GALLONS PER MINUTE
IN	INCH
J.C.	JANITOR'S CLOSET
LAT	LAY-IN ACOUSTICAL TILE
LPS	LITER PER SECOND
MACH	MACHINE
MI	MINERAL INSULATED
MNS	MASS NOTIFICATION SYSTEM
MPS	MANUAL PULL STATION
MR	MACHINE ROOM
NAC	NOTIFICATION APPLIANCE CIRCUIT
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NO.	NUMBER
NOS.	NUMBERS
NTS	NOT TO SCALE
OPG	OPENING
P	PHASE
P.S.	PIPE SHAFT
PSI	POUNDS PER SQUARE INCH
QR	QUICK RESPONSE
RM	ROOM
SLC	SIGNALLING LINE CIRUIT
SPKLR	SPRINKLER
SSU	STANDARD SPRAY UPRIGHT
STDP	STANDPIPE
SF	SQUARE FOOT
SPD	SURGE PROTECTION DEVICE
STO	STORAGE
TC	TERMINAL CABINET
TOJ	TOP OF JOIST
UNO	UNLESS NOTED OTHERWISE
VA	DEPARTMENT OF VETERAN'S AFFAIRS
VAC	VOLTS ALTERNATING CURRENT
VAMC	VA MEDICAL CENTER
VDC	VOLTS DIRECT CURRENT
WP	WEATHERPROOF
W/	WITH

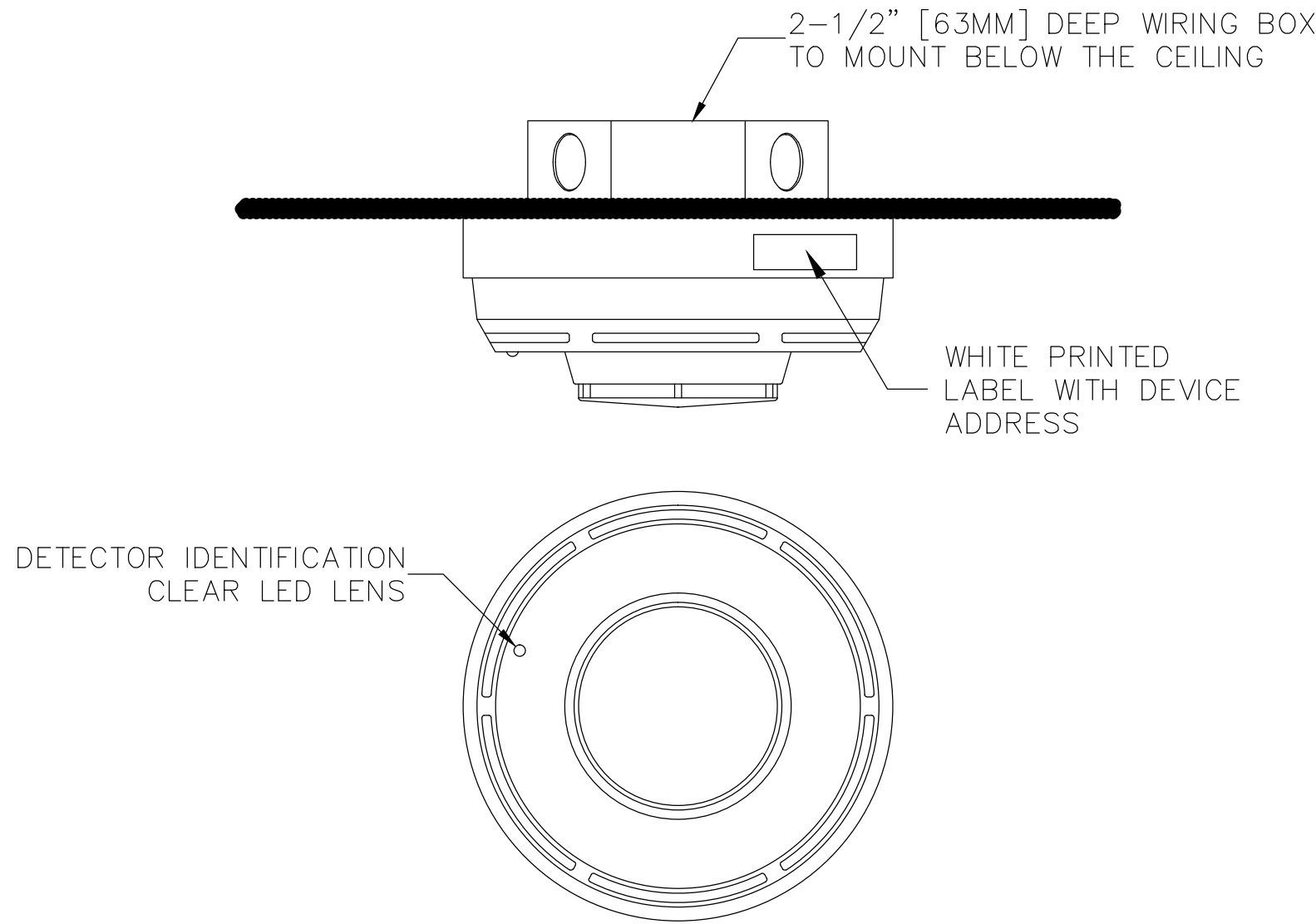
FIRE ALARM LEGEND

F	PULL STATION
②	SMOKE DETECTOR
②	DUCT SMOKE DETECTOR
H	HEAT DETECTOR
RT	REMOTE TEST STATION (FOR DUCT DETECTOR)
W	FLOW SWITCH
S	TAMPER SWITCH
☀	STROBE
☀	SPEAKER/STROBE
☀	SPEAKER/STROBE, WALL MOUNTED
○	SPEAKER
○	SPEAKER, WALL MOUNTED
FACP	FIRE ALARM CONTROL PANEL
FARP	FIRE ALARM REMOTE CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
FPS	FIRE ALARM REMOTE POWER SUPPLY
AMP	SPEAKER AMPLIFIER
AI	ADDRESSABLE INTERFACE
AR	ADDRESSABLE RELAY
⏏	DISCONNECT
⏏	TRANSIENT VOLTAGE SURGE SUPPRESSOR
⊙	ELECTROMAGNETIC DOOR HOLDER
⋮	CONTINUATION MARK
REV	REVISION
#	KEY NOTE

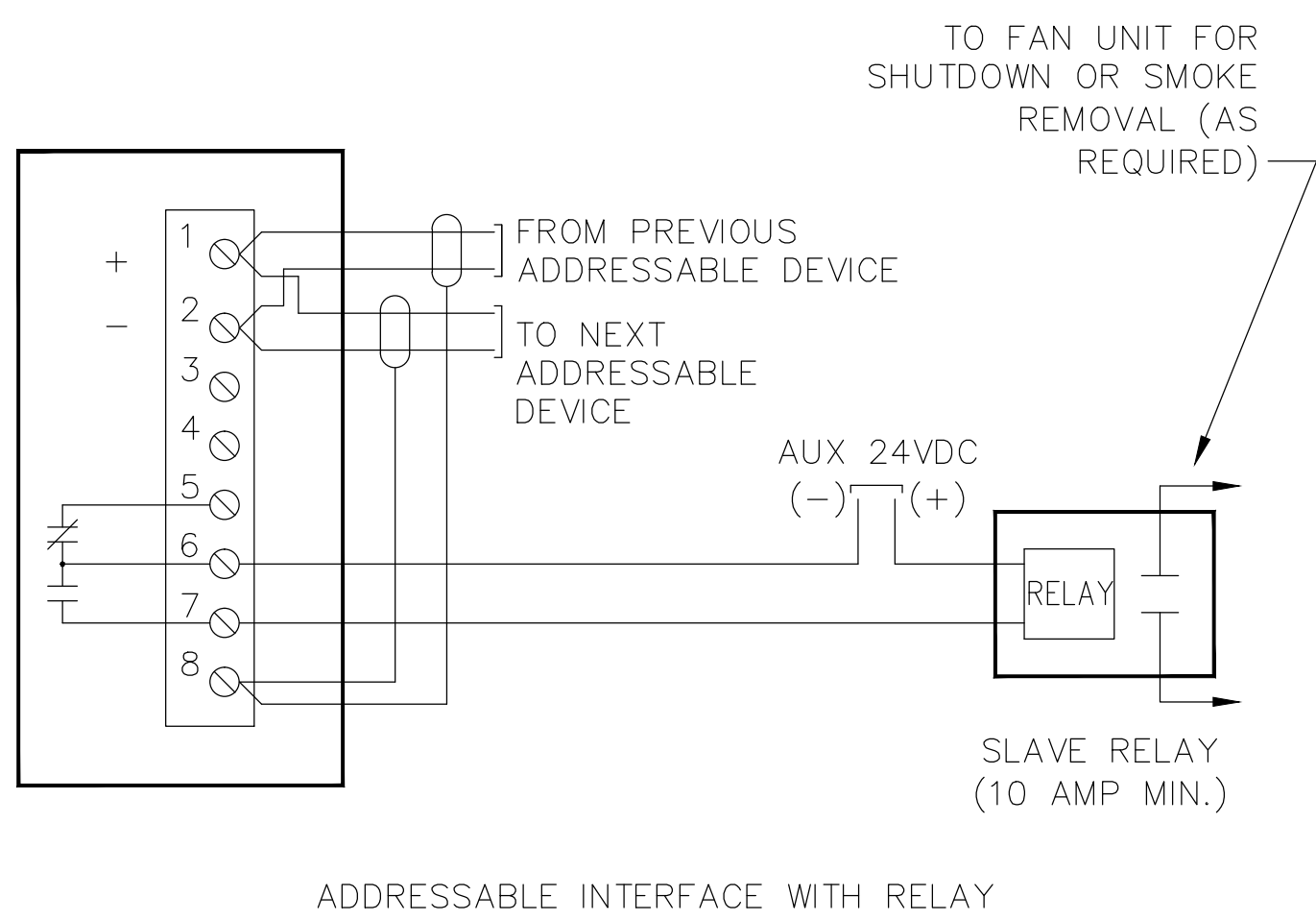
"XXcd" INDICATES MINIMUM NOMINAL STROBE CANDELA RATING



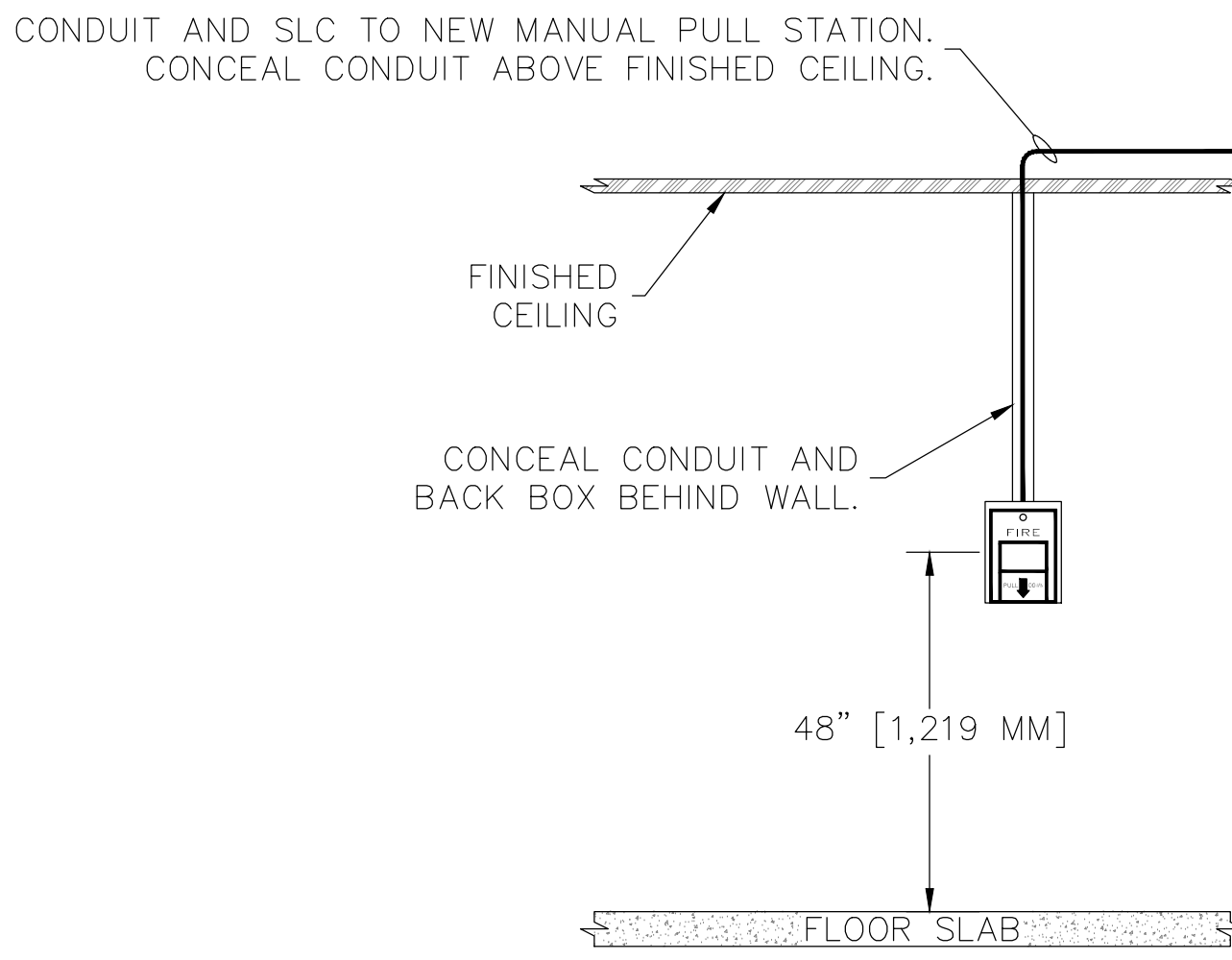
4 WALL MOUNTED SPEAKER/STROBE N.T.S.



1 CEILING MOUNTED SMOKE DETECTOR N.T.S.



2 ADDRESSABLE CONTROL MODULE N.T.S.



3 PULL STATION MOUNTING HEIGHT N.T.S.

CONSTRUCTION DOCUMENTS 100% - FOR BID	06/12/2012
CONSTRUCTION DOCUMENTS 100% SUBMITTAL	06/22/2011
CONSTRUCTION DOCUMENTS 95% SUBMITTAL	02/01/2011
DESIGN DEVELOPMENT 50% SUBMITTAL	06/21/2010
SCHEMATIC DESIGN 15% SUBMITTAL	05/03/2010
Revisions:	Date

VA FORM 08-6231, OCT 1978

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FIRE ALARM GENERAL NOTES AND LEGEND

Approved: Project Director

Project Title
VA MEDICAL CENTER 4E
PATIENT WARD EXPANSION

Location
WASHINGTON DC

Date
04/20/2010

Checked
FAE

Drawn
PAM

FA-001

Project Number
688-336

Building Number
E

Drawing Number



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Office of
Facilities
Management

